October 24, 1962

Dr. Stanfield Rogers
Memorial Research Center
The University of Tennessee
Knoxville, Tennessee

Dear Dr. Rogers:

Thank you for your letter of October 18. Your letter reminded me of the enclosed note, of which perhaps only the date may be amusing to you.

I think it is a very real possibility that viruses will be used to convey genetic information to deficient genotypes in a constructive sense. As you know, Dr. Kornberg and his colleagues have been particularly interested in phage induced enzymes, and Vas Aposhian, who was recently with Kornberg and has now gone to Tufts, told me that he was going to make a particular point of surveying the related effects of animal viruses. In my own view, it will only be a matter of time, and perhaps not a long time, before polynucleotide sequences can be grafted by chemical procedures onto a virus DNA so as to make possible the systematic application of the kind of procedure you suggest. This would be going one step further than looking for the accidental recombination of virus and host genetic material, as can now sometimes be recognized. So the most constructive step to anticipate this advance would be to define those viruses whose other biological properties in analogy to lysogeny makes them most apt as the carriers of such additional genetic information.

I do not know how one goes about persuading large organizations to adopt a new line of scientific work. The best I can think of is to throw ideas into the common pot of scientific discussion.

Sincerely yours,

Joshua Lederberg
Professor of Genetics

JL:edf